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| (21) International Application Number: PCT/US99/16968<br>(22) International Filing Date: 28 July 1999 (28.07.99)<br>(30) Priority Data:<br>60/094,326 28 July 1998 (28.07.98) US<br>(71) Applicant (for all designated States except US): SAFETY-LINER SYSTEMS, LLC [US/US]; 27286 Jimmy Lane, Conroe, TX 77385 (US).<br>(72) Inventors; and<br>(75) Inventors/Applicants (for US only): TAYLOR, Jack, Curtis [US/US]; 27221 Kane Lane, Conroe, TX 77385 (US). ROACH, Max, Jerry [US/US]; 27286 Jimmy Lane, Conroe, TX 77385 (US).<br>(74) Agents: FINDER, James, A. et al.; Ostrolenk, Faber, Gerb & Soffen, LLP, 1180 Avenue of the Americas, New York, NY 10036 (US).  |  | (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).<br><br><b>Published</b><br>Without international search report and to be republished upon receipt of that report. |  |
| (54) Title: ENHANCEMENT OF PROFILED TUBULAR LINING SYSTEMS BY CHANNEL AUGMENTATION  |  |  |  |
| <p>The diagram shows a cross-sectional view of a tubular system. On the left, a host tubular (10) is shown with a liner (32) being pulled into it. The liner has longitudinal members (31) and channels (33). The liner is shown in a curved position, indicating it is being pulled into the host tubular. The host tubular has a central opening (30) and a longitudinal member (34) on the right side. The liner has a longitudinal member (31) and a channel (33) on the left side. The liner is shown in a curved position, indicating it is being pulled into the host tubular. The host tubular has a central opening (30) and a longitudinal member (34) on the right side. The liner has a longitudinal member (31) and a channel (33) on the left side.</p> |  |  |  |
| (57) Abstract<br>A tubular system made up of a tubular, a liner in the tubular, and longitudinally oriented members, which may be disposed within channels in the liner. The members advantageously may be used for pulling a liner into a host tubular, and/or maintaining the structural strength of the liner. The members are continuous along the length of the plastic-lined tubular, and if applicable, through intermediary joints. The channels may be in the inner and/or outer surfaces of the liner. The members may be usable for carrying electrical current or signals, fiberoptic signals, or data communications; for heating the liner; and/or for detecting faults in the liner and/or the host tubular.   |  |  |  |